NAVVY

Metal and Water Finder

USER MANUAL

NAVVY'S User Manual, the latest device to detect the whereabouts of various kinds of water underground.

WWW.MWF-USA.COM

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The operating in high voltage areas would limit the results and performance

It's better to turn off mobile while using the device.

Don't operate two devices with same method of search at the same place

Don't store in high temperature or high humidity

Disconnect the batteries before long time storage

The operator Must remove any metals that might affect the opreatin eg:Rings,watch, belt....

Any attempt to tamper the device or unapproved maintenance would void the warranty

For best power endurance and reliability. use heavy duty and high quality batteries thats for the devices which work on removable batteries

- The user must practice before starting the detecting operations and discoveries
- Store in Cool and dry place 15-40 C 5%-75% humidity

Read & Understand
The User's manual
before using this device

Search for:	Searching for underground water
Search principle :	Long-range locator system to detect energy levels about the location of water
Operating processor :	ARM & MICROCONTLLER PIC18
Processing type :	processing the energy levels formed around the area of water existence LRL
Max depth:	500 m
Max distance:	2000 m
Wireless:	yes
Automatic steering system:	Yes, through the pointers and alerts
sound alerts:	yes
vibration alerts:	yes
Power:	TWO-cell lithium-ion 3.7v/2000mA
Battery life:	6 work hours
Charge:	2000mA/9v 3 hours for full chrging
Display:	TFT screen 3.4 inch65.536 48MHz CDMA GPU Color processing speed

Storage temperature:	From -15° C to 40° C
Humidity:	%90 It can be stored and work in the degree rate of air humidity of level
Weight:	1.25Kg with the case
Unite dimensions:	22x5x4.5cm
Case dimensions:	27x25x9cm

Main unit

1. Power button
2. Back button
3. Move button
4. Enter button
5. display screen
6. Transceiver antenna
7. Grip
8. Gharger socket
9. Battery box

Main Unit

It is the unit responsible for leading the search and controlling the attached units and processing the data extracted from the ground and displaying it on the screen using the most advanced interactive programs and systems.

Transmitting and Receiving Antennas

Two radio antennas to transmit and receive backwaves from the target due to the high-sensitivity transmitted waves.

Grip

A free-moving handle allows the device to rotate, with an axial movement, with the advantage of direct and easy installation and uninstallation.

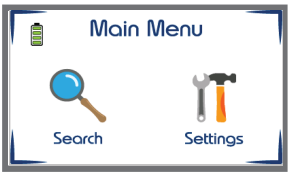
Charger

Electric charger to recharge the device battery
Values: Input: 100-240VAC / 50-60Hz / 0.4 amps
Output: 9 volts AC / 2 amp / 15 Watt.

Set up and work on the main unit

- Turn the device on by pressing long press on the Power switch
- Boot interface will show and then the language selection interface for the first use of the device

- When you select the language by switching between them through the move button and select the desired language by pressing the confirmation button the device moves to the main interface

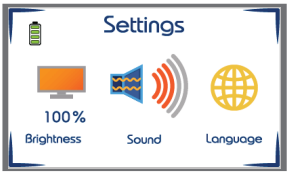


❖ The main interface has two icons
Search To select the search system and settings to adjust the settings of the device in addition to an indicator indicating the level of battery charge found in all interfaces, is switching between the icons by pressing the move button, to confirm one of the options we press the confirmation button Enter

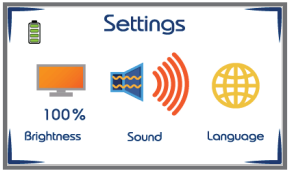
❖ When we select the setting icon

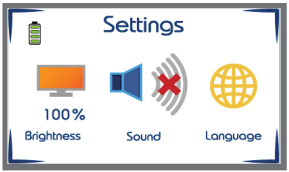
❖ When you select the settings icon and press the enter button, we have a settings interface that enables us to reset the device. The settings interface contains options for adjusting both brightness and sound as well as the language of the device

❖ Brightness adjustment: When selected on the brightness icon, the value of the screen brightness is changed by pressing the Enter button to change the brightness value according to ten brightness levels from 10% to 100%



❖ Volume Adjustment: When selected on the volume icon, the volume is changed by pressing the Enter button to change the volume according to five volume levels in addition to silent mode and vibration mode you could turn off the vibration mode by select the volume icon and then long-press the enter button.

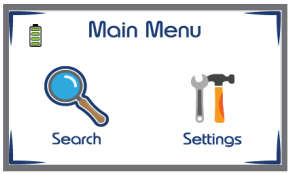




❖ Language settings: When selecting on the language icon to change the language we press the enter button to move to the interface of languages The device contains four languages English, Turkish, Spanyol and Arabic
Switching between these languages is done through the move button
To confirm a language, click the ENTER button

❖ To return to the settings interface, press the Back button.

❖ When the search icon is selected and the confirmation button is pressed, the search system interface appears, where the navigation is carried out to specify the search parameters using the navigation button,Initially, the target type to be searched is determined from among the available targets (all types - natural water - mineral water - saltwater) by pressing the Enter buttonIn the same way, both the distance and depth are determined. Before starting the search, we install and equip the device's attachments

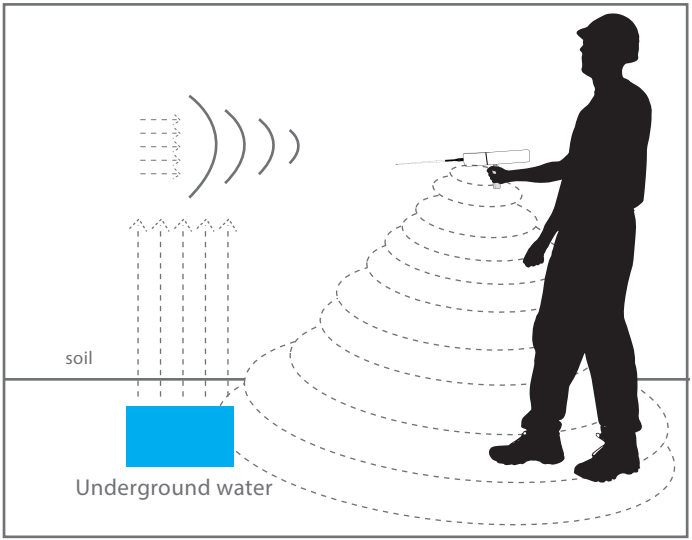


Long Range Locator System

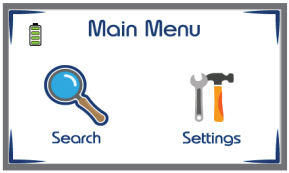
1. Connect the signal booster antenna to the main unit
2. Connect the telescopic antenna to the main unit
3. Connect the grip to the main unit

This system works on the technology of transmission and reception, it sends and receives waves at the same time, it searches for the target according to its types by sending a signal with a frequency corresponding to the self-absorption frequency, which differs according to the type of water. As the water molecules, according to its type, absorb (dampen) the electric signal, thus the difference in .the received signal strength reveals the presence of water

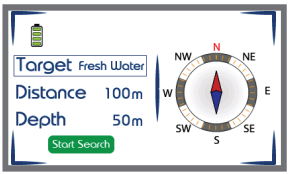
This device relies on the detection of underground water through the impact of waves out of the device static electricity fields formed around the water as a result of its presence under the ground, waves of the device to amplify the size of these fields and escalate to the surface of the soil, which helps the device in locating water from long distances, The device amplifies this signal and directs the target location directly and accurately to the destination through the automatic pointers on the screen



How to work with the search system

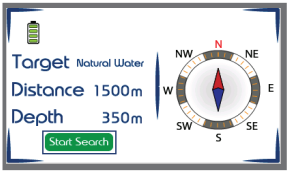


❖ After preparing the main unit and installing the attachments, the main unit must be turned on, selecting the search icon, and pressing the Enter key for the search settings interface to appear as shown in the pictures



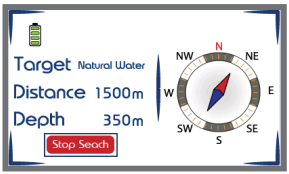
❖ The interface of the search system contains the search settings that are specified by the use

* Distance: Search distance in all directions: (100 m - 250 m - 500 m - 750 m - 1000 m - 1500 m - 2000 m).
* Depth: The depth of the target to search for: (25 m - 50 m - 100 m - 150 m -250 m - 350 m-500 m).



❖ After selecting the search settings are finished, we go to the Start Search icon by clicking on the Navigation button in the main unit it will create a frame around the Start Search icon .

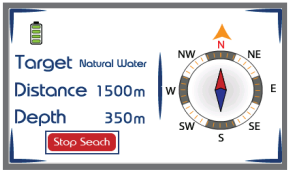
❖ Then we press the Enter button to start the search process .

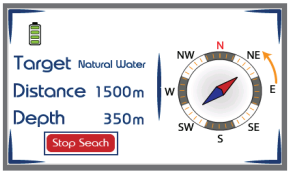


❖ Note the compass movement indicating the direction of movement .

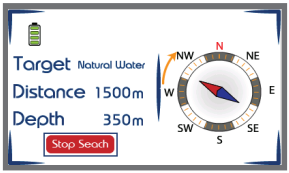
❖ When the device detects a site for the presence of groundwater, we will notice that the device is directed towards this path of the water location to start an accurate tracking process for the location and path of the water, we press the MOVE key

❖ Right track



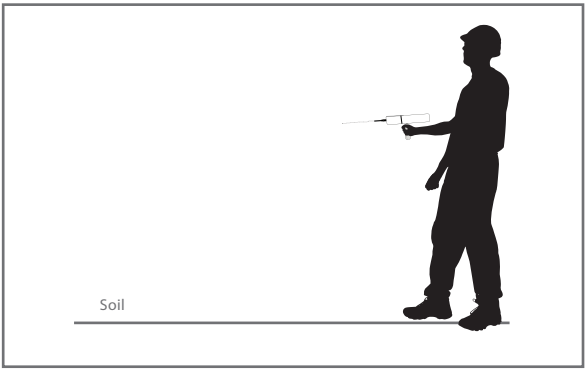


❖ When the user drifts the device to the left, the correction of the search path towards the water is shown by taking corrective indicators either right or left

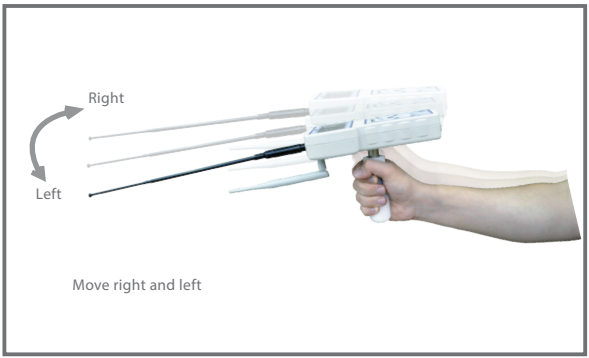


❖ You can pause and resume the search as well as modify the search settings in the attached module

❖ The user should carry the face through the handle in a horizontal with the ground and slightly tilted towards the soil as shown in the drawing

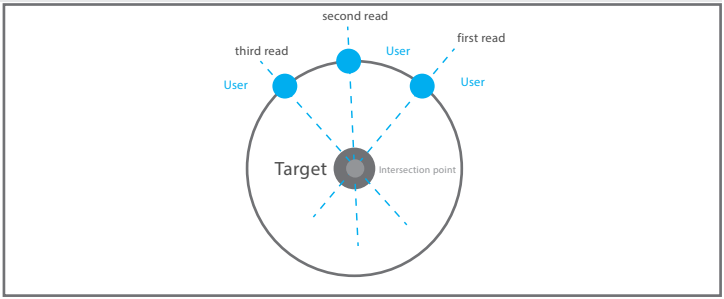


❖ We then stimulate the waves and fields out of the device where we move the device by hand to right and left slowly and then install the hand that holds the device



Move right and left

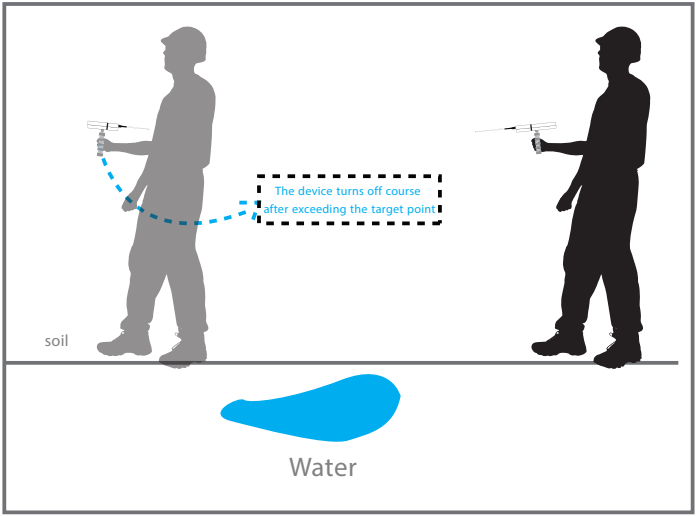
❖ If the target is found, the device will receive a read and signal by automatically changing the device from the normal path to which the target was located. This direction is the direction of the target's location, and then the device is installed in the same direction. Scan the target location and install it by pressing again on the (Move) key to note that the device starts when the user deviates the device from the direction of the target and shows the correction of the search path towards the target by taking corrective indicators either left or right. With the launch of a voice alert.then we completely circumvent the direction to which the device is directed to, to the opposite parking point to notice the change of the device again and direction To the target location and trigger the alarm Constantly, Press the move key again to finish the installation then we move away from the first reading point to sideways, and we do the process of stand in another location away from the first point meters10 stimulation of the waves of the device again and install the device and wait for reading, in case the target is sure will go again to the same siteWe reinstall the reading by pressing the move key and be We have confirmed the existence of the target, and it is possible to do this method more than once in order to make sure the direction of the target is correct, by taking more than one reading from the device from different points, and if we notice theoretically that all the readings that we made are cut by one point It is a place and a target point



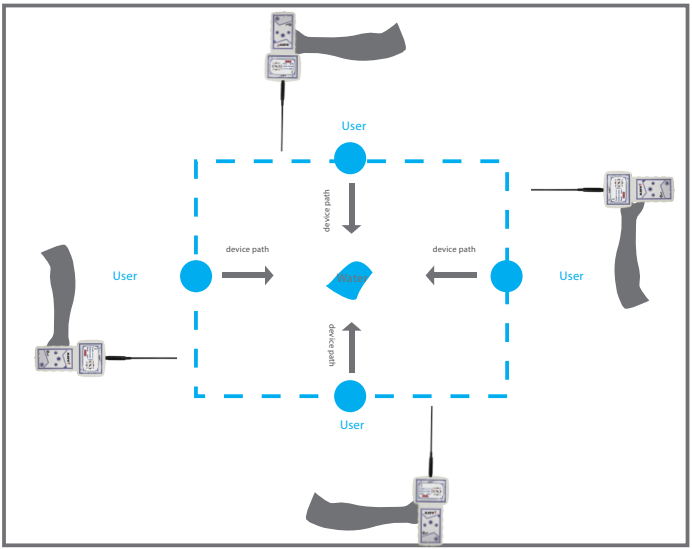
❖ The user can know and estimate the distance of the target from the starting point of the search, and to do this we change the level of distance, and we choose a distance from the list of distances, for example if we had chosen at the beginning of the search distance of 500 meters, we reduce the distance to 250 meters ,and then press the key (Enter) again and the device starts to search and do the previous steps and at this time we hold the device and wait for reading if we received a reading of the target we have known that the target away from the search point distance of 250 meters It is also possible to re-these settings again ,and reduce the distance less to estimate after the target Better .and then we move to a challenge D target site location

How to locate water

- At first the user should point the antennas down towards the ground slightly
- After confirming more than one reading of the direction of the presence of water we press the move button to install the target path and we walk in the same direction and normal to carry the device.Note during which the device issued alerts to indicate that walking is in the right track towards the indicator. It is an arrow indicating the direction of the convolution to return to the right path, until we reach the point where we bypass the water site and we will notice that the device has automatically changed direction from its natural path to turn back to the location and the point of the water, here we also rotate with the device to the location of the water. Hey and we walk slowly and when we are directly above the water site we will notice the device will start to turn left and right and this indicates that we have identified the point of water

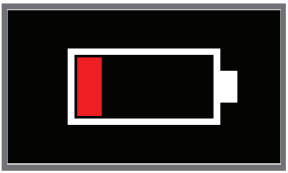


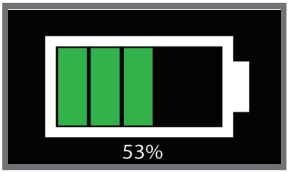
- There is another way for us to more accurately determine where the target is located
  We are the process of squaring the target site by taking four readings of the target point from four angles ,
  Square three meters from the target site, we will notice the intersection point of the four readings
  Theoretically it will be the midpoint of the target



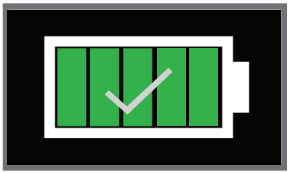
The user can know the approximate depth of the target by returning to the main menu and setting the search settings again and change the depth level through the depth list, ie for example if the depth that was first meters and we enter the information, and away About 250 meters we reduce the level of depth to 100 selected meters and hold the device and wait for reading the target location, if there is a reading 20 the target location meters, and we do this process to reduce the 100 of the target site here know that the depth may be between level of depth until we know the approximate depth of the target

❖ When the battery charge runs out, the battery screen appears as shown, where the battery image appears in red flashing and an audible alert is heard

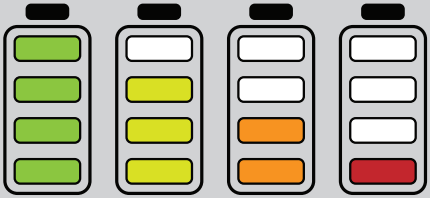




❖ When you put the device on charging in the case of extinguish the charging screen is a battery that gradually increases periodically and shows the percentage of the level of battery charge for ten seconds and then turns off the device can see the battery charge level during the charging process by pressing one of the three buttons (Enter - Back - Move) The display shows the charge level for five seconds and then turns off the device. When the battery is .full, the display shows a correct indicator ✓ inside the full battery



❖ There are four cases for battery during the work that indicate how full the battery charge in different colors in order from empty to full (red - orange - yellow - green) as shown in the drawing



Warnings

Use the charger supplied with the device only and do not use other

Store the device and charger in a safe place away from flammable materials

Make sure to turn off the device after you have finished using the device or before storing it

Do not keep the charger connected to the device after the completion of the charging process

Metal and Water Finder

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